REMARKS

The Applicant appreciates the thorough review of the Application by the Examiner. Reconsideration and allowance of all claims are respectfully requested. By this Amendment, Claim 6 - 8 have been amended and Claims 10 - 11 have been added. Claims 1 - 11 are now pending in the Application. No new matter has been added by the amendment. No new issues are raised by the amendment. Claims 6 and 7 have been amended to overcome the 35 U.S.C. 112 rejections of those claims on Page 2 of the Office Action. Claim 8 has been amended to correct an informality and new Claims 10 and 11 capture the subject matter canceled from Claim 7.

Regarding the objection to the Specification and rejection of Claim 1 under 35 U.S.C. 112, second paragraph, Applicant respectfully requests clarification of the Examiner's position. The means for identifying the type of pest appears to be well described in the Specification as filed. For example, Page 10, lines 9 - 18 read:

> "To detect pests or traces after pests and to determine species, their numbers and size, etc., an immense variety of technologies and techniques are being employed. Different types of sensors, each operating on the basis of one or several electrophysical, mecanical, biotechnical and biochemical measuring principles are used individually or in situation-specific combinations. For instance, it is possible to measure light, temperature, smell, sound, weight and length. In relation to the preferred embodiment of the invention, special light and techniques associated therewith (e.g. photocell, IR, UR and diffuse light), computer-supported biochemical and chemical analyses, as well as digital camera technique combined with computer-based image analysis and pattern recognition are used." (emphasis added)

See also Page 10, line 20 to Page 11, line 6, Page 7, lines 9 - 25, Page 13, lines 4 - 7, Page 14, lines 1 - 3, and Page 18, lines 22-33. It is therefore believed that sufficient antecedent basis is found in the Specification.

Applicant requests that the Examiner also review the attached documentation. These documents illustrate a commercial embodiment of the present invention and may aid the Examiner in understanding the invention and its use.

Claims 1 - 9 are patentable under 35 U.S.C. 103(a) over Gardner, Jr. et al. (US2003/0213161).

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

Gardner does not teach or suggest all the limitations of Claim 1. For example, Gardner does not teach or suggest means for identifying the type of pest or software modules incorporating self-learning in response to generated data and predetermined responses in view of incoming collected data. The Examiner cites to paragraph 56 of Gardner as teaching means for identifying the type of pest. In section [0056] Gardner describes various normal commercially available traps which may be used with Gardner's system. This requires knowledge to the types of pest likely to be present in the environment the trap is to be placed. The traps themselves are

not means for identifying the type of pest. Even a trap intended for one type of pest may trap a different kind. There is no mention anywhere in Gardner of the ability to identify the type of pest.

The present invention uses only one type of trap regardless of the pest. The system has means for detecting characteristics of the particular pest present in the trap. These characteristics are compared to earlier collected data in a database, and the type of pest is identified. After identification the trap is activated by commands from the central computer to carry out pre-determined responses (such as activating one or more means for exterminating the pest). The system furthermore has a "self-learning" capability, such that particular or unusual behaviour of an otherwise well known behavioural pattern for that particular spices of pest may be recorded and stored for further use in generating the appropriate pre-determined response.

Therefore where Gardner uses a multitude of different traps, depending on the environment the present invention uses one trap which may also be operated solely as a sensor.

In practice the sensors includes among others artificial "sniffers" (artificial noses), which are sophisticated enough to distinguish between rats, mice and cockroaches etc, image and/or pattern analysis and recognition. Also PIR sensors (Passive Infrared Sensors) are used – see claim 2, which are sensitive to radiation specific to certain species, and furthermore react to changes in radiation, indicating movement of a pest in the trap.

As mentioned, an important feature of the present invention is the software modules incorporating self-learning in response to generated data and predetermined responses in view of incoming collected data, which is not taught by Gardner. The Examiner does not assert otherwise. For at least the above reasons, Claim 1 is patentable over all references. Because Gardner does not teach or suggest all the claimed limitations, and the Examiner has not argued

that it does, it is respectfully submitted that the Examiner has not put forth a *prima facie* case of obviousness and that the rejection must be withdrawn.

Claims 2 - 9 depend from Claim 1 and share its patentable features and add further patentable limitations. Examples are given below.

Claim 3 adds that the detection unit, when the pest is an insect, comprises one or more of the following detection sensors: infrared temperature and/or movement sensors, a plate member comprising a sticky surface arranged such that optical recognition means coupled to a reference database may scan the plate member or, alternatively, the plate member may be placed in a scanner for data collection, or as a further alternative the plate member may be combined with digital camera techniques as for example CIF, CCD, or VGA technology cooperating with suitable analysis and recognition software, a source of UVA blacklight and/or a source of pheromone or a source of bait.

The Examiner cites to Gardner as teaching a movement sensor. Gardner disclose a photo celle, which operates by emitting a light beam into a photo detector. As the beam is broken, it is registered that something broke the beam. It does not provide any information as to what broke the beam. In theory it could be leaves blowing in the wind, a finger, insect or the like. It cannot even determine that any movement has occurred outside the sensor- if the laser beam moves, it may be broken by a stationary object.

The camera technology used by the present invention, by means of photo and pattern recognition identifies the pest, by comparing the acquired images with a database and in this manner in addition to detecting the presence of "something" also identifies the type/species, in order to generate the proper input for the system.

Claim 5 adds that the system further comprises means for transmitting a status report on the current status of the detection unit at predetermined time intervals, and, additionally, is capable of transmitting alarm signals if/when action (activity) is detected in the detection unit. Gardner does not teach or suggest this feature.

The Examiner cites to Gardner as teaching "that the status report on the current status of the detection unit at predetermined time intervals." That does not speak to the element of transmitting alarm signals if/when action (activity) is detected in the detection unit.

In section [0042] Gardner suggests that data may be stored in the sensor, and transmitted to the central server at a later point in time; for example when an operator initiates the procedure. The invention as disclosed in claim 5 operates in a different manner. Signals are transmitted to the central computer at predetermined intervals, regardless of there being any activity in the trap/sensor. This is done in order to ascertain that the sensor is operating properly and is online, which is very important for the proper functioning of the system. The further feature that data relating to activity in between the predetermined times when the sensor transmits to the central unit may also be carried out with the present invention.

Claim 6 adds that the central server comprises a database where data from the detection units as well as actions in response to such data is stored, and that the data by means of suitable software is used in order to predict possible causes of presence of pests, causes of alarm and/or suggest possible actions, and that the collected data is correlated and integrated with the database. Gardner does not teach or suggest this feature.

The Examiner cites to Gardner sections [0050] – [0053] as disclosing the same features. This however is not the case. The system according to Gardener relies on a physical inspection. This inspection is costly and may, depending on the physical location and distribution of

sensors/traps be very time consuming. The present invention, by employing more advanced sensors, which Gardner advises against, see section [0051], is able to online detect all necessary features in order to reliably determine the type and number of pests in the sensor/trap. This provides for substantial savings, even taken into account the more expensive hardware.

For at least the reasons given above, the rejection of Claims 1 - 9 under 35 U.S.C. 103(a) over Gardner is improper and should be withdrawn.

CONCLUSION

Reconsideration and allowance of all claims are respectfully requested.

Respectfully,

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Date: January 31, 2008

GreenTrapOnline

GTO Rodent Detector Unit

GTO Detectors and other GTO sensor units together with Bluetooth access points and a Global GTO WebServer form the unique integrated GTO pest control surveillance system.

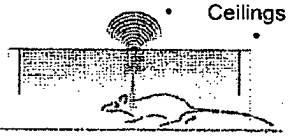
GTO Rodent Detector detects the presence of rodents. In case of activity an immediate message will be sent to GTO WebServer for registration in the central GTO SAP database.

Access to the entire system is only possible for authorized personel and only through Internet

Advantages
Small size = flexible multi usability
For indoor/outdoor use
Maintenance-free
Easy to use

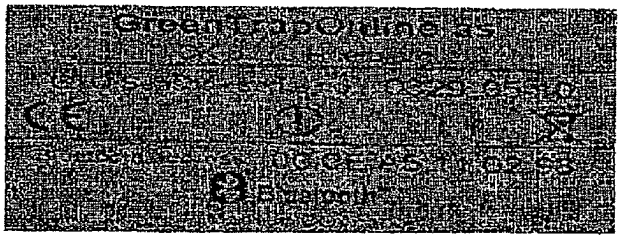
Basic function of GTO Rodent Detector Unit
Placeable anywhere rodents may be precent or hide

- Tubes and tunnels
- Cable-gutters
- Ceilings
- Tin-cats
- Bait boxes
- Trap boxes



Specifications

- 65x72x30 mm
- Movement sensor based
- Bluetooth Radio (up to 100 M) – Internal antenna
- Dust and moisture safe
- Storing capacity 250 events
- 3,6 V LiCl 2,4 mAh Battery (last 5 years)
- Keyboard: Test, Reset, ON/OFF and LED
- Event message immediately
- Alive message 1/ hour
- All messages dedicated for GTO WebServer



Unique ID's – every single Bluetooth based GTO unit is wearing its own unique Bluetooth address = ID. No other Bluetooth units will have identical ID

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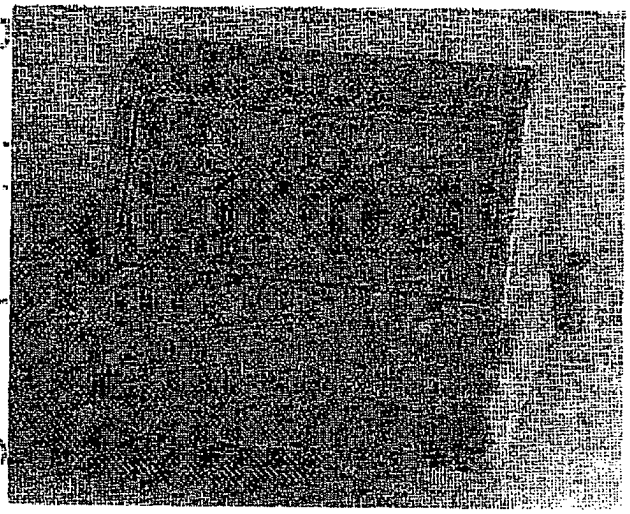
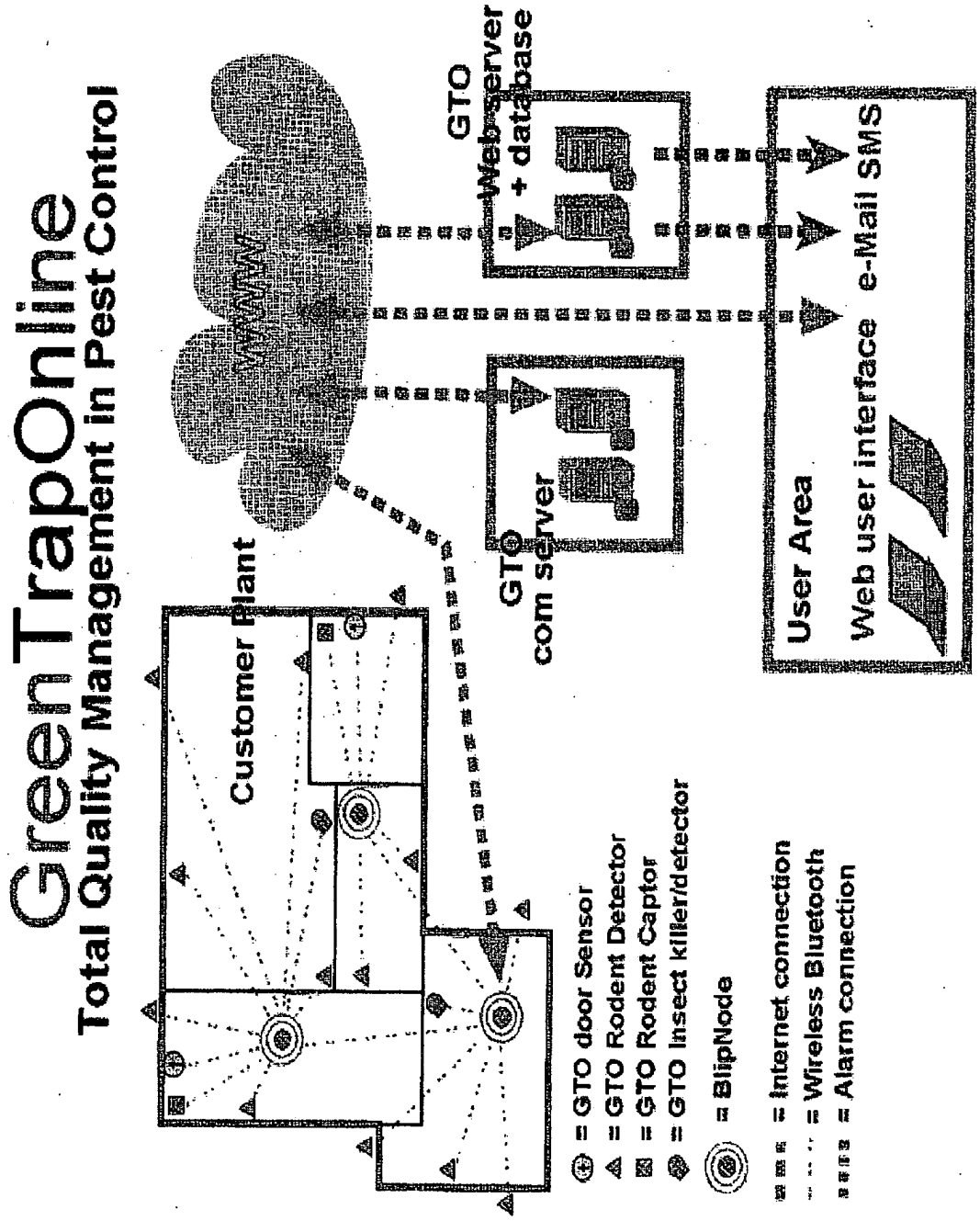


Users guide

NORMAL SERVICE	
Switch ON	Push > 5 sec until green flashlight ●
Switch OFF	Push > 5 sec until red flashlight ●
Check ON or OFF	Short push: Green light ● = ON No light = OFF
Alive	Just after switched ON and about every 60 minutes Alive message is sent to GTO Comserver. After successfully delivered sending flash will show ● and sensor goes in **sleep mode**
Detection	Rodent activity: sensor wakes up, detects, flashes ● and sends message immediately
Reset ALL	Press **R** for 2 sec (●● = resets all timers)
Test	Press T (●) – try to send alive message for testing that detector is in RF-sight
FAULT SERVICE	
After 1st trial	If – of any reasons – sensor cannot deliver a message, flash will show ●, and 2 ekstra trials will be done
After 3rd trial	If delivering don't succeed after 3. Trial sensor goes into **sleep mode.** Next trial after 60 minutes – then its time for an alive message.
After 3 x 3 trials	If delivering still miss after 3 x 3 trials next trial will be done after 2, 4, 8, ... resp 24 hours – then detector will enter into **spare mode**
Spare mode	Every 24 hours detector tries to deliver alive message + any stored activity messages. After success – detector will return to normal service
Detection	After 1st not delivered message, any detected activity will be stored until time for next alive sending (1 to 24 hours)
Storing	The detector can keep up to 250 events


GreenTrapOnline
Total Quality Management in Pest Control
Customer Plant
GTO com server
GTO Web server + database
User Area
Web user interface
e-Mail SMS
= GTO door Sensor
= GTO Rodent Detector
= GTO Rodent Captor
= GTO Insect killer/detector
= BlipNode
= Internet connection
= Wireless Bluetooth
= Alarm connection